# USTAR OVERVIEW

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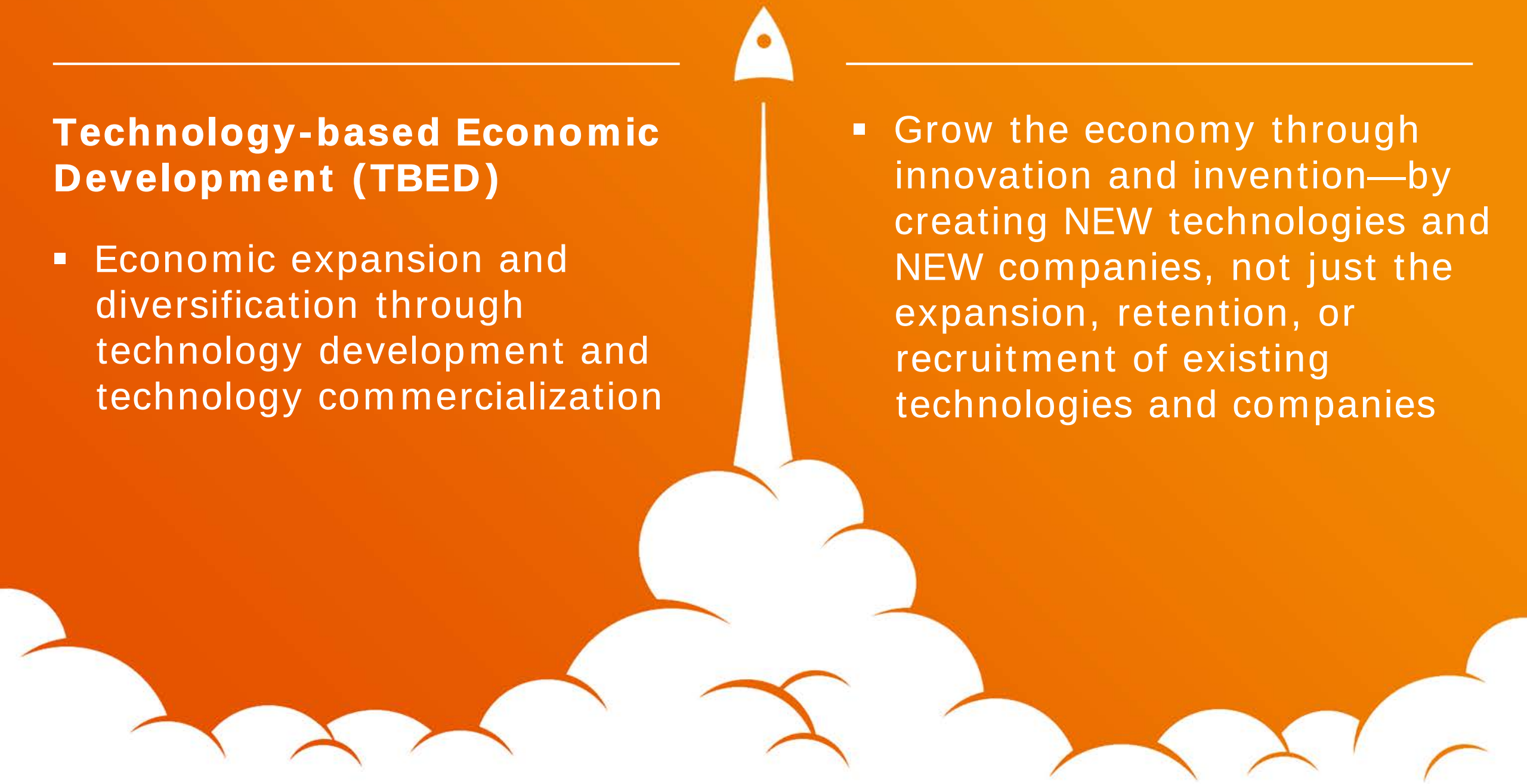
Brian Somers, Managing Director

## Technology-based Economic Development (TBED)

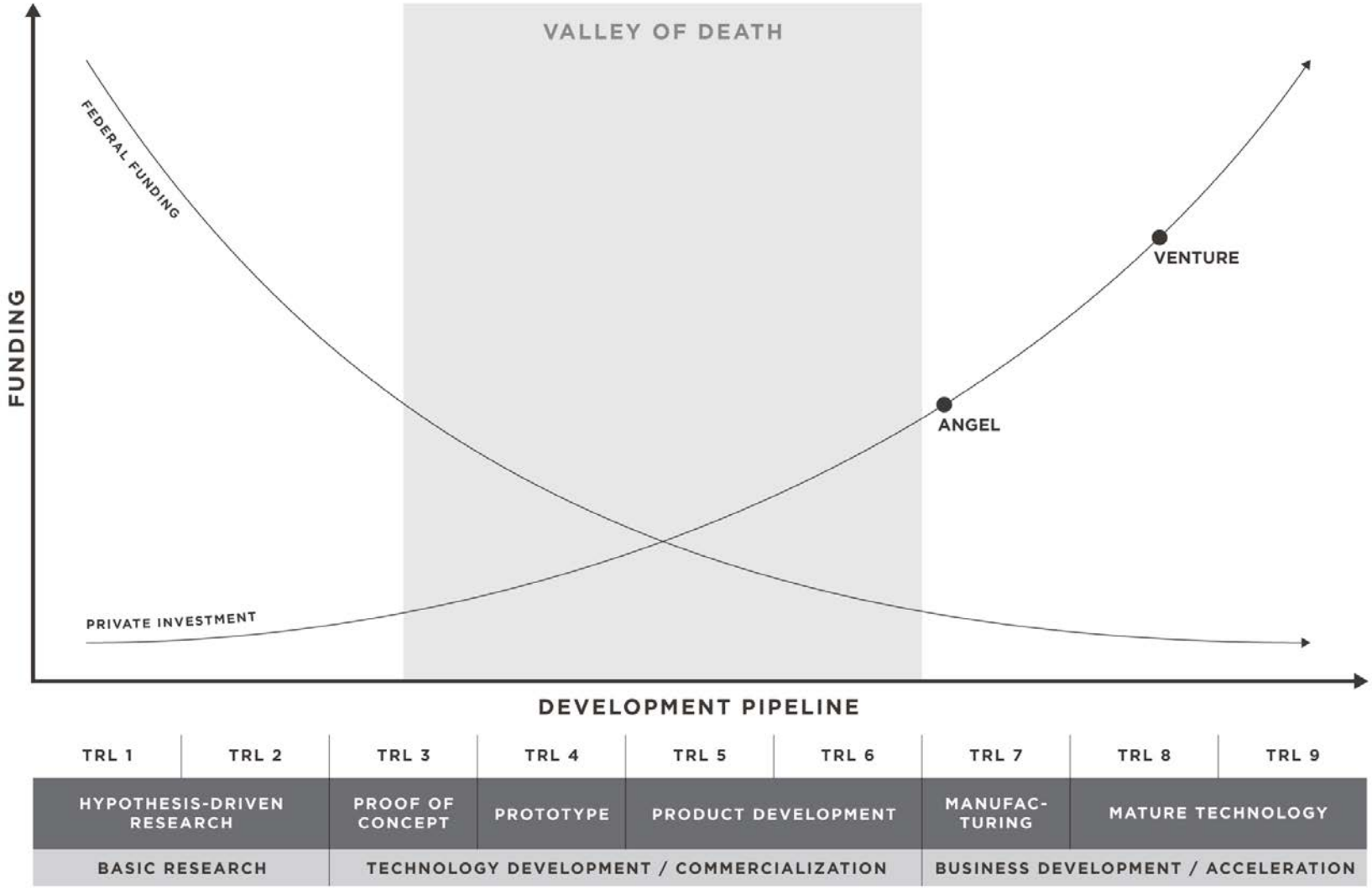
- Economic expansion and diversification through technology development and technology commercialization



- Grow the economy through innovation and invention—by creating NEW technologies and NEW companies, not just the expansion, retention, or recruitment of existing technologies and companies

# Risk Capital Market Gap & Economic Diversification

# MARKET GAPS: THE VALLEY OF DEATH

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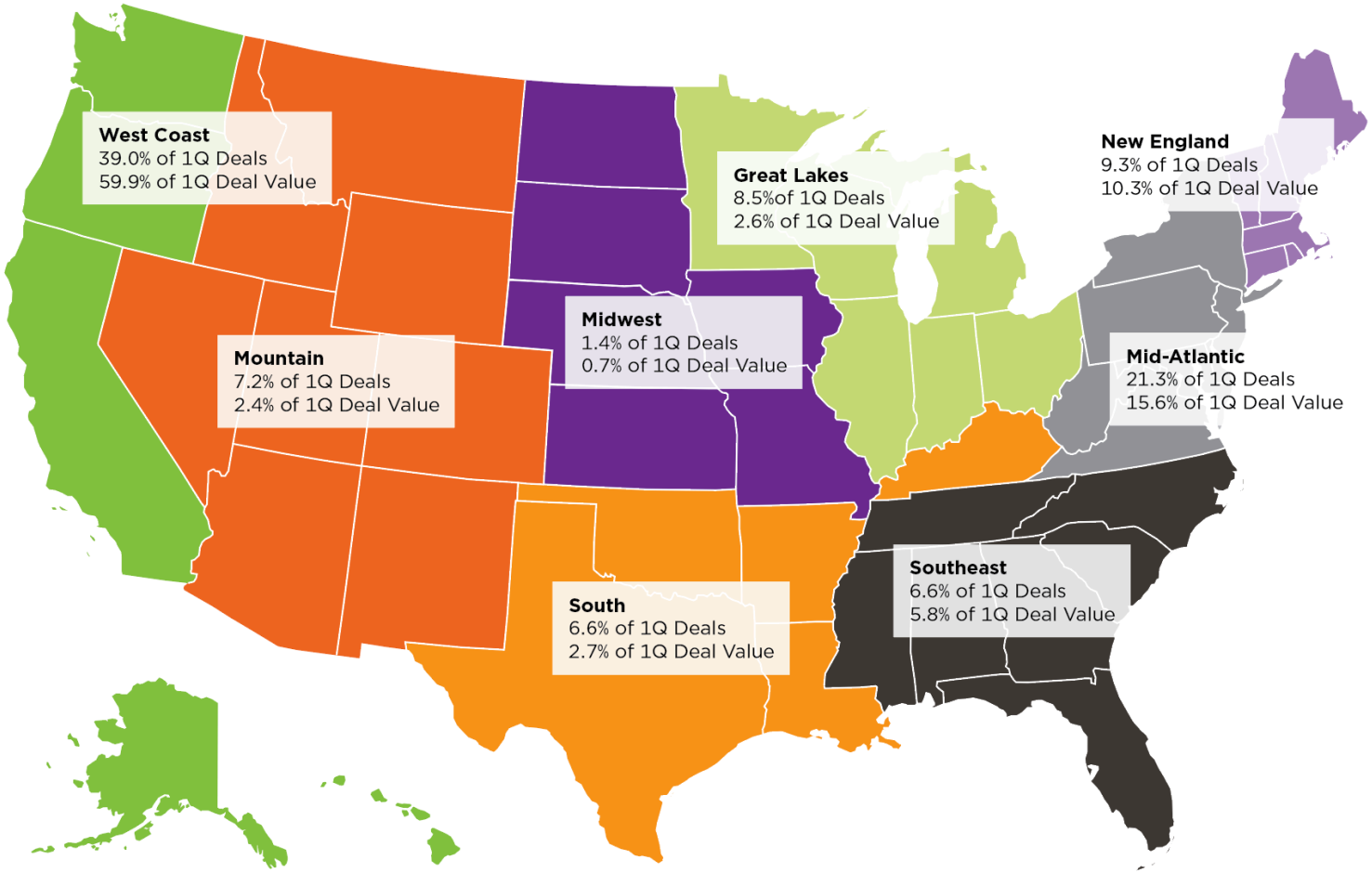
# MARKET GAPS: VENTURE DEAL DISTRIBUTION




*PitchBook-NVCA Venture Monitor*

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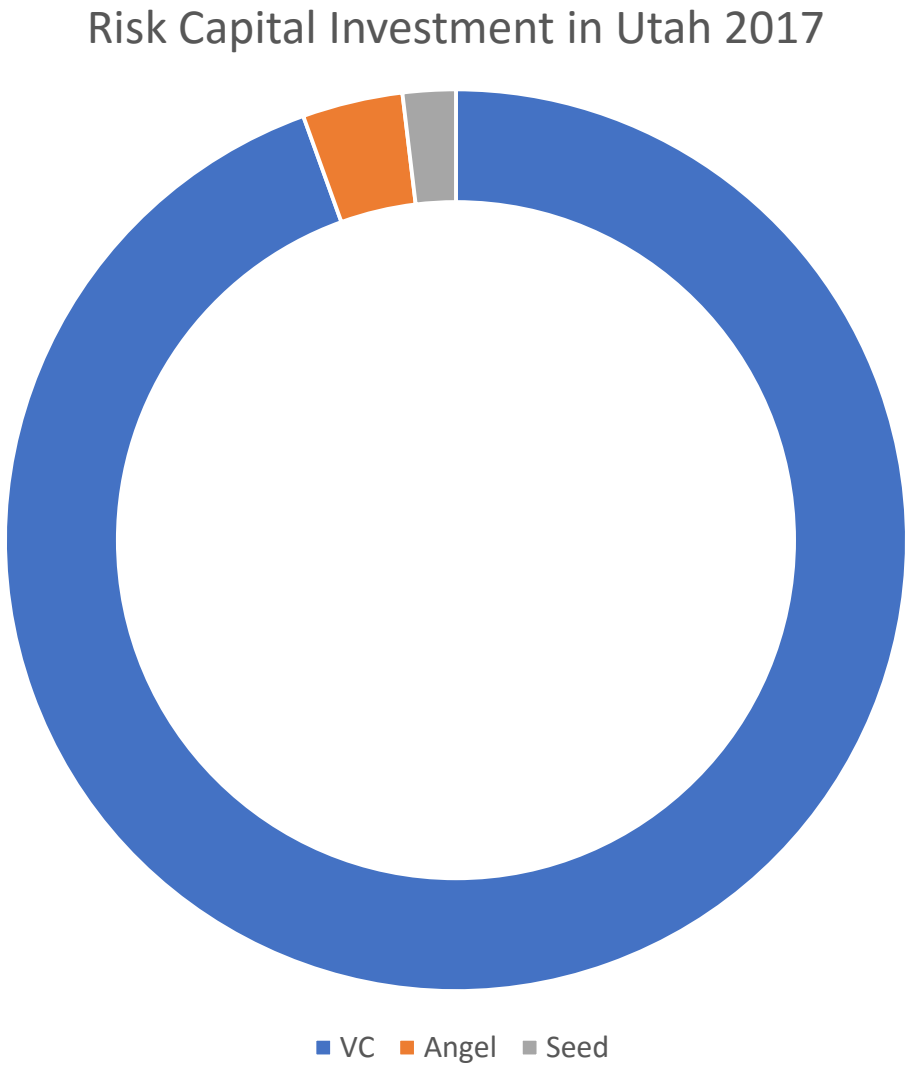
# MARKET GAPS: VENTURE INVESTMENT IN UTAH

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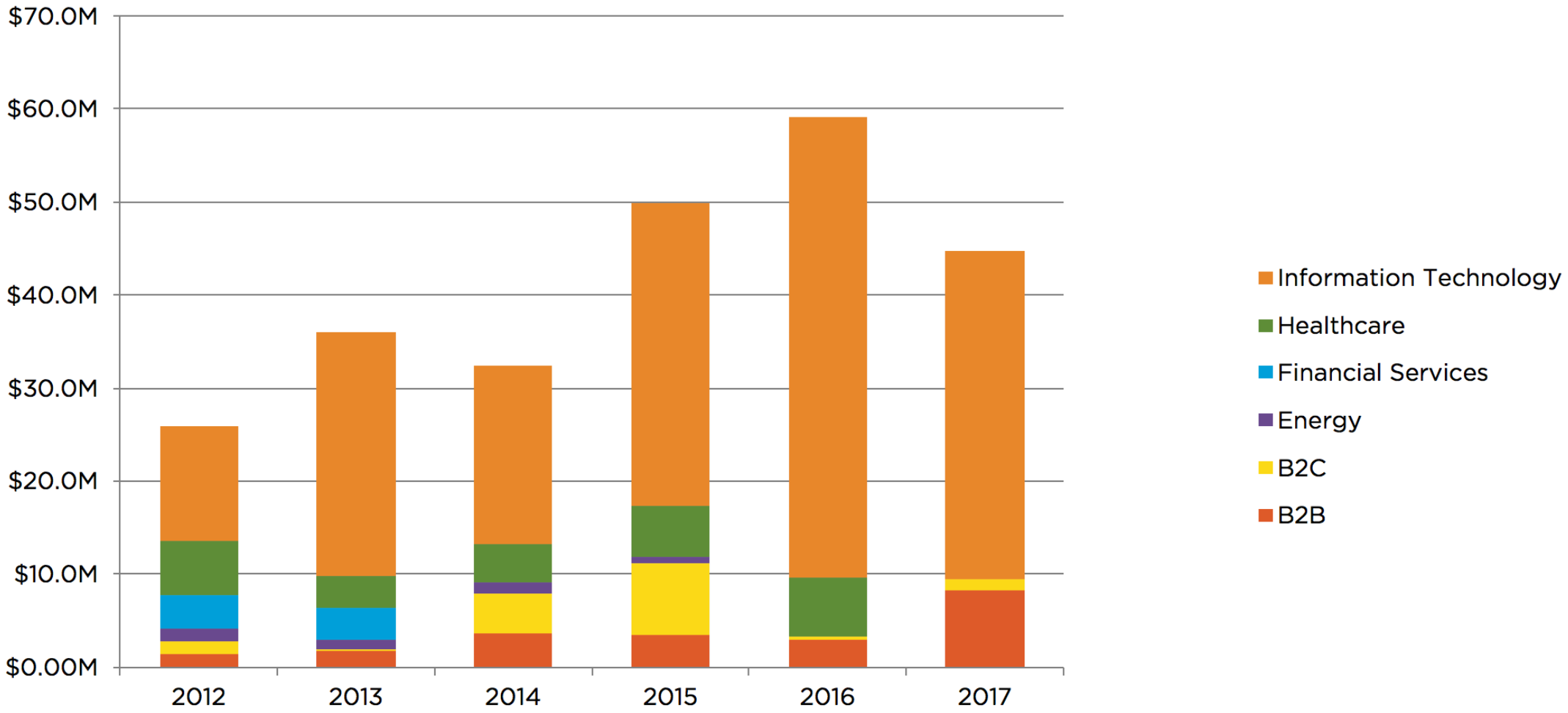
# MARKET GAPS: SEED INVESTMENT IN UTAH

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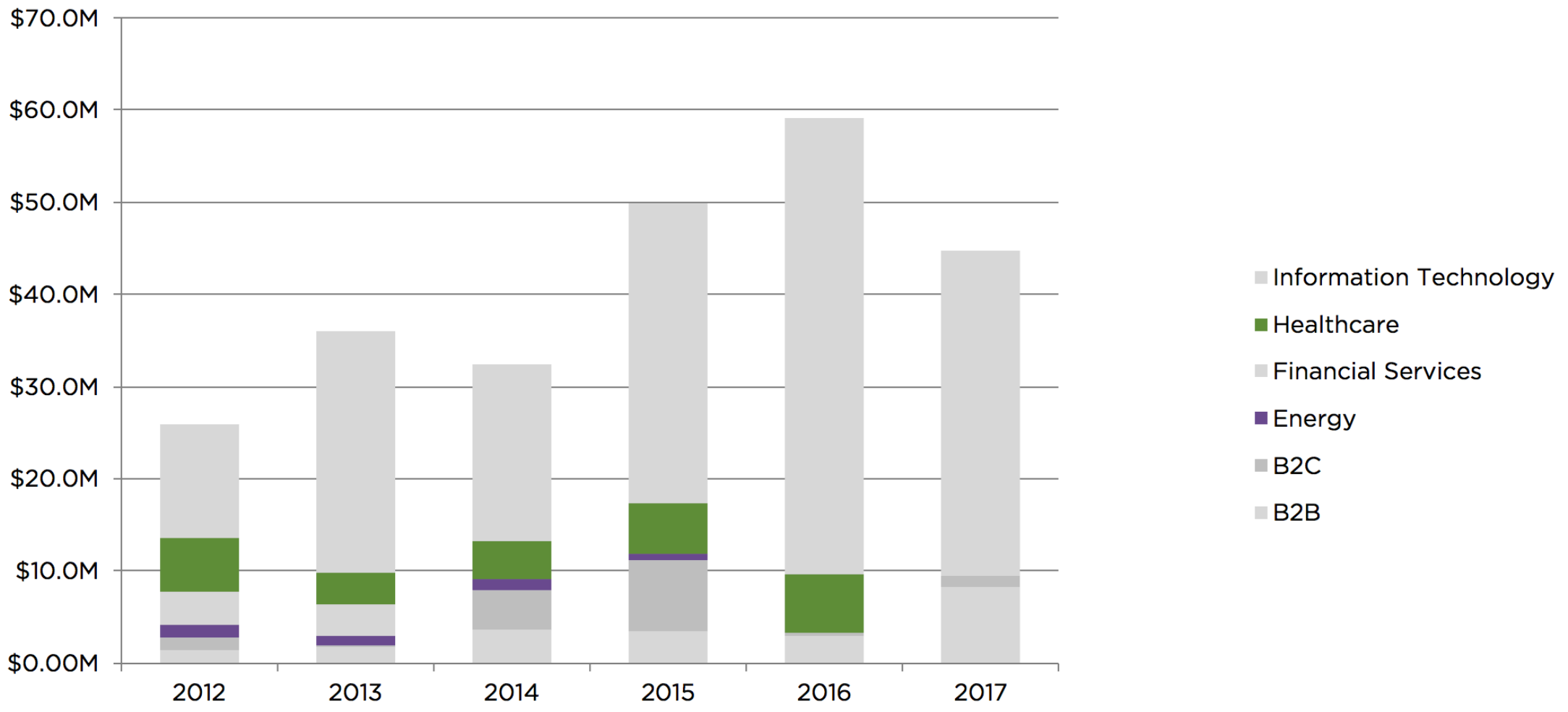
# MARKET GAPS: DEEP TECH SEED INVESTMENT IN UTAH

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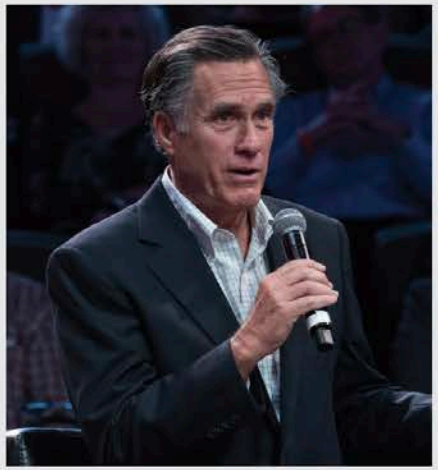
# ECONOMIC DIVERSIFICATION

**Utah's tech economy is becoming less diverse.**

THE MILKEN INSTITUTE'S TECHNOLOGY CONCENTRATION AND DYNAMISM COMPOSITE INDEX

| Rank | Average Score | Year |
|---|---|---|
| 1 | 85.40 | 2008 |
| 1 | 86.80 | 2010 |
| 1 | 86.00 | 2012 |
| 1 | 92.89 | 2014 |
| 13 | 63.55 | 2016 |

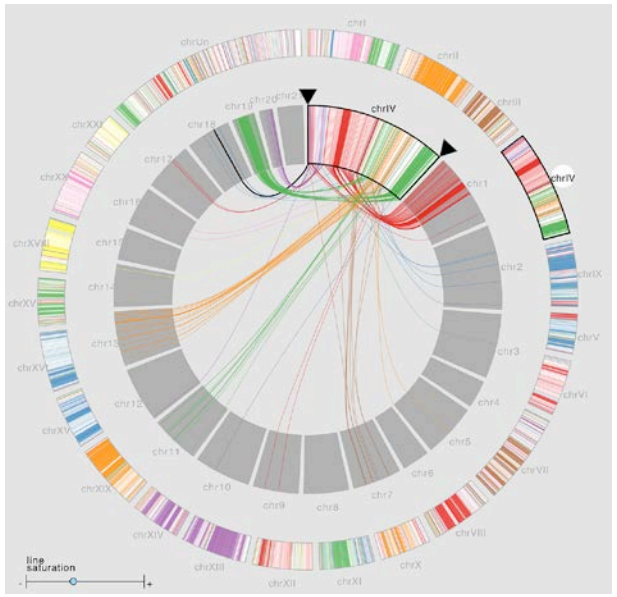
# MARKET GAPS

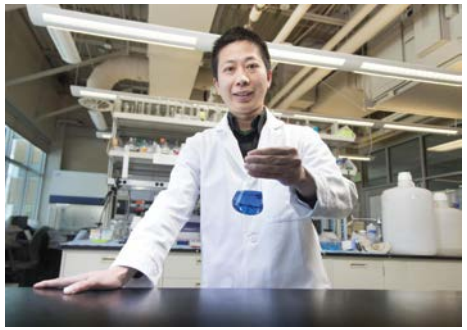


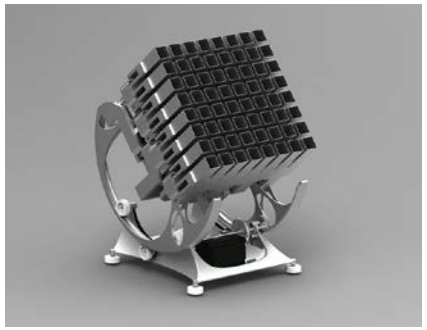
*"About 90 percent of venture capital in our state... has gone to software and service businesses. Very little actually gets into some of the deep technologies that are so essential to our long-term growth. And that's, of course, where USTAR fits in."*

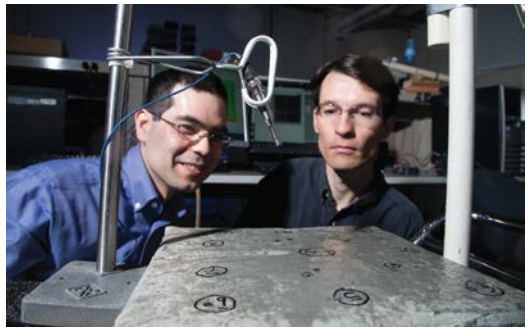
— Mitt Romney, Keynote Speaker, Utah Technology Innovation Summit

# USTAR TARGETED DEEP TECHNOLOGY SECTORS









- Aerospace
- Automation & Robotics
- Big Data & Cybersystems
- Energy & Cleantech
- Life Sciences

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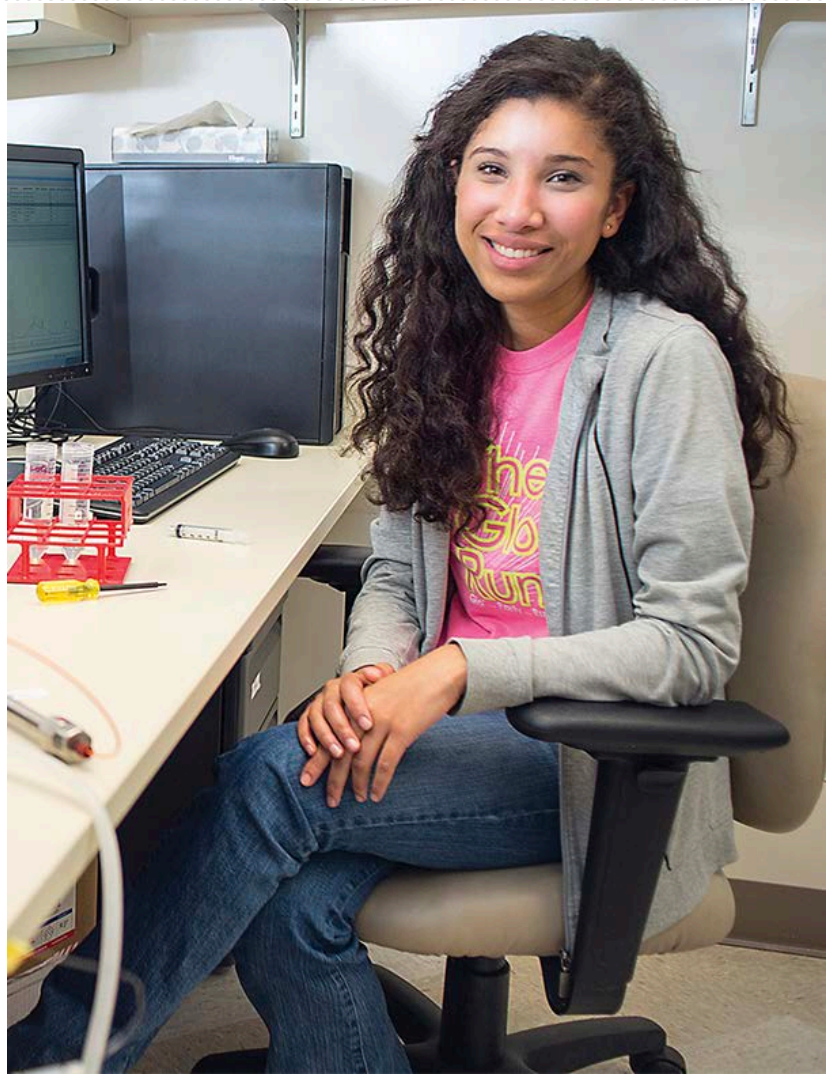
# DIVERSE WORKFORCE OPTIONS

- Deep tech startups and small companies provide diverse employment options for Utah's STEM-educated workforce
- Deep tech startups and small companies providing training, internship, and apprenticeship programs for university students in STEM fields
    - *Example: 308 university trained through University Technology Acceleration Grant (UTAG) program*
- Very few state programs provide direct assistance to help entrepreneurs and small companies
- **Diverse employment options can help to stop Utah's graduate "brain drain"**
    - **50% of graduates in aerospace and medical fields leave the state**
    - **44% of graduates in engineering leave the state**



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# DEEP TECH ROOTS RUN DEEP

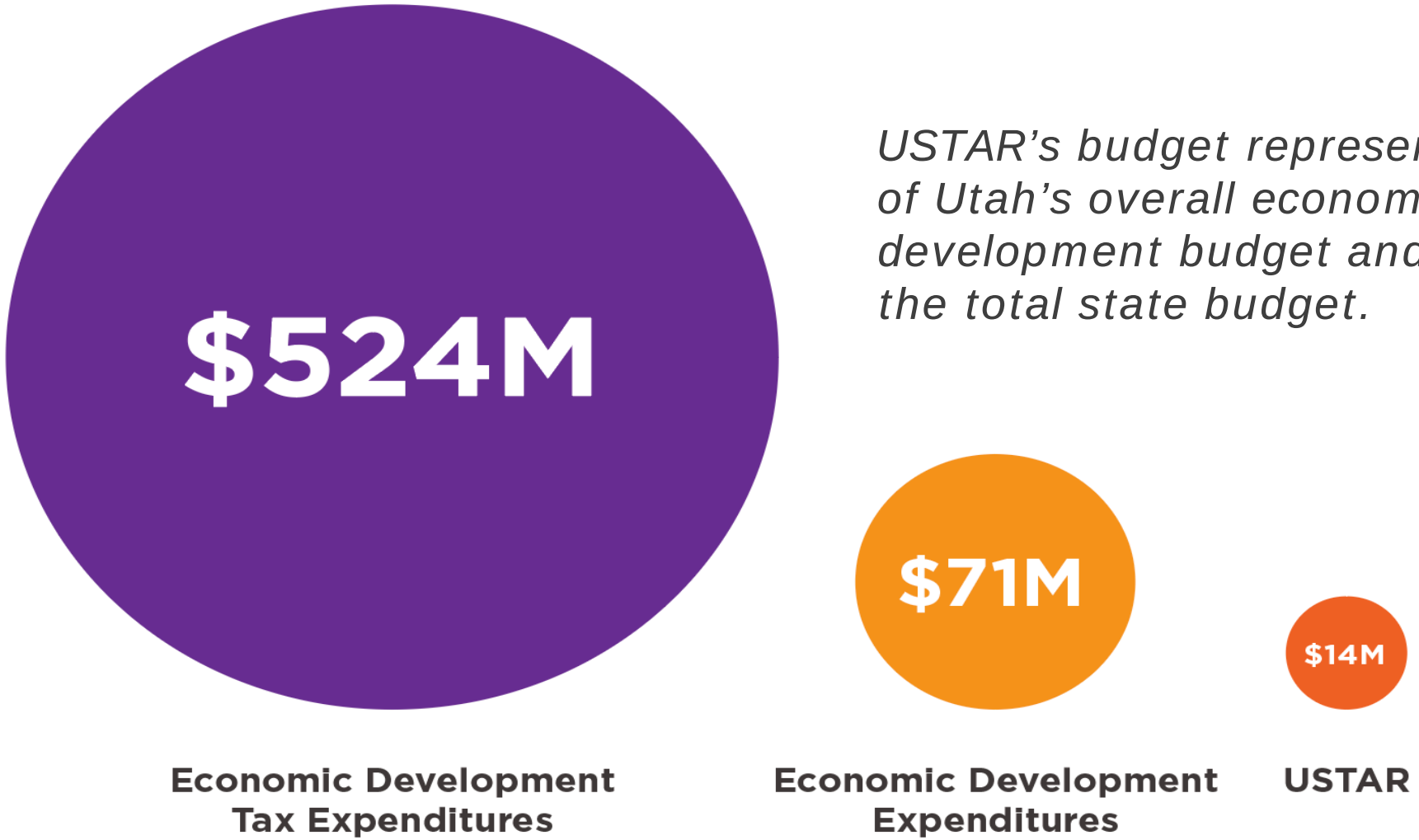
- High capital costs that are barrier to entry in early stages can provide geographic stability in later stages
- Developing critical mass in specific clusters can provide stability and growth opportunities
  - Example: Utah medical device community
- Many deep tech companies trace their histories in Utah back decades


→ BD

Thiokol → Orbital ATK → NORTHROP GRUMMAN

# Economic Development Landscape

# TBED VS OTHER ECONOMIC DEVELOPMENT PROGRAMS IN UTAH




*USTAR's budget represents only 3% of Utah's overall economic development budget and 0.09% of the total state budget.*

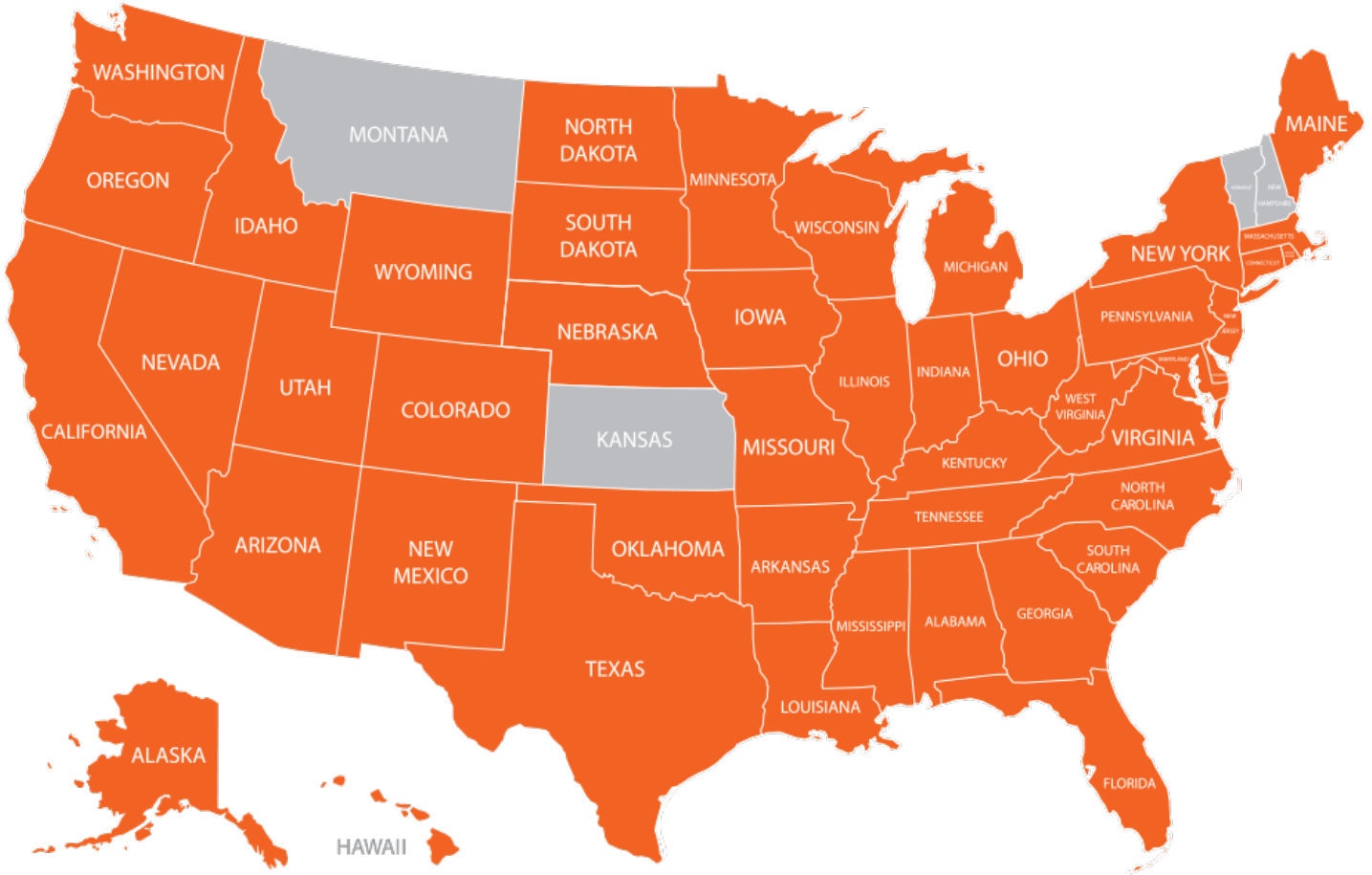
**“Because we need to compete, we have our own incentive programs to prime the pump.”**

**-Governor Gary R. Herbert**

**FDI Luncheon**
**Taipei, Taiwan**
**September 20, 2018**

# TECHNOLOGY-BASED ECONOMIC DEVELOPMENT (TBED)

## STATES WITH TBED PROGRAMS

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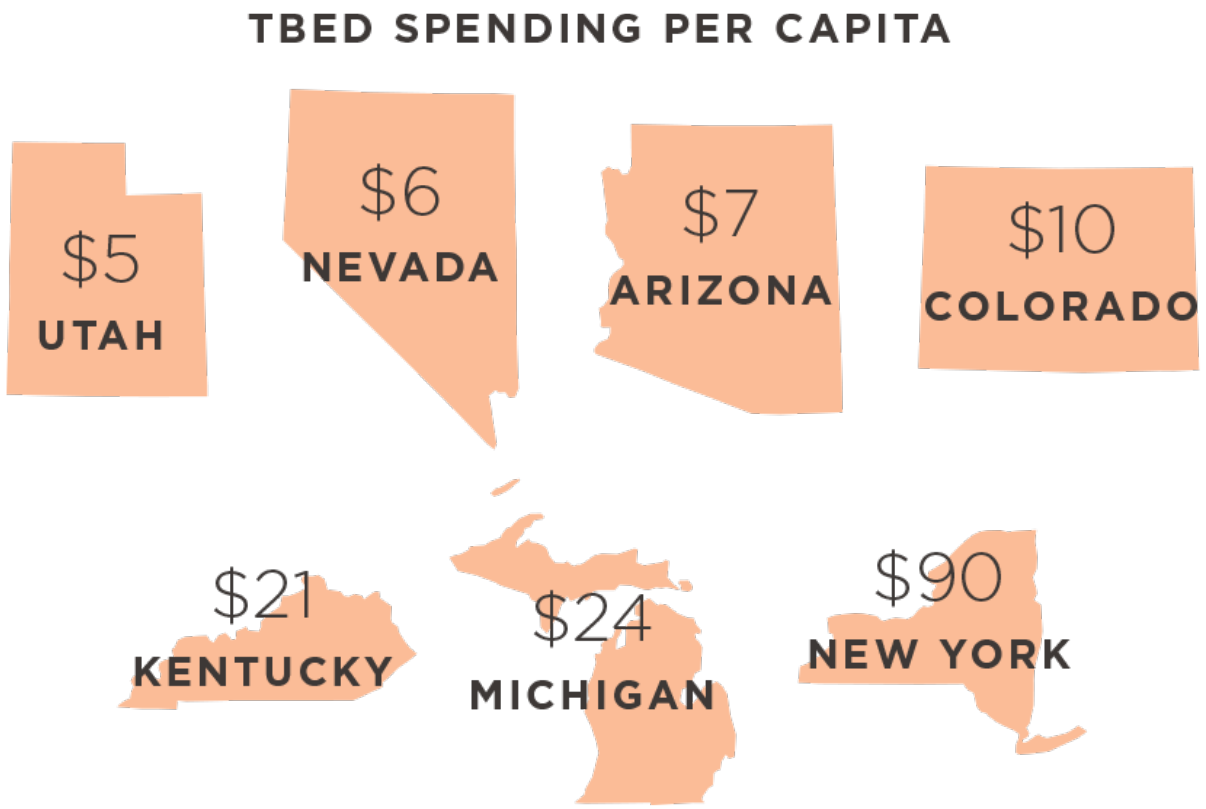
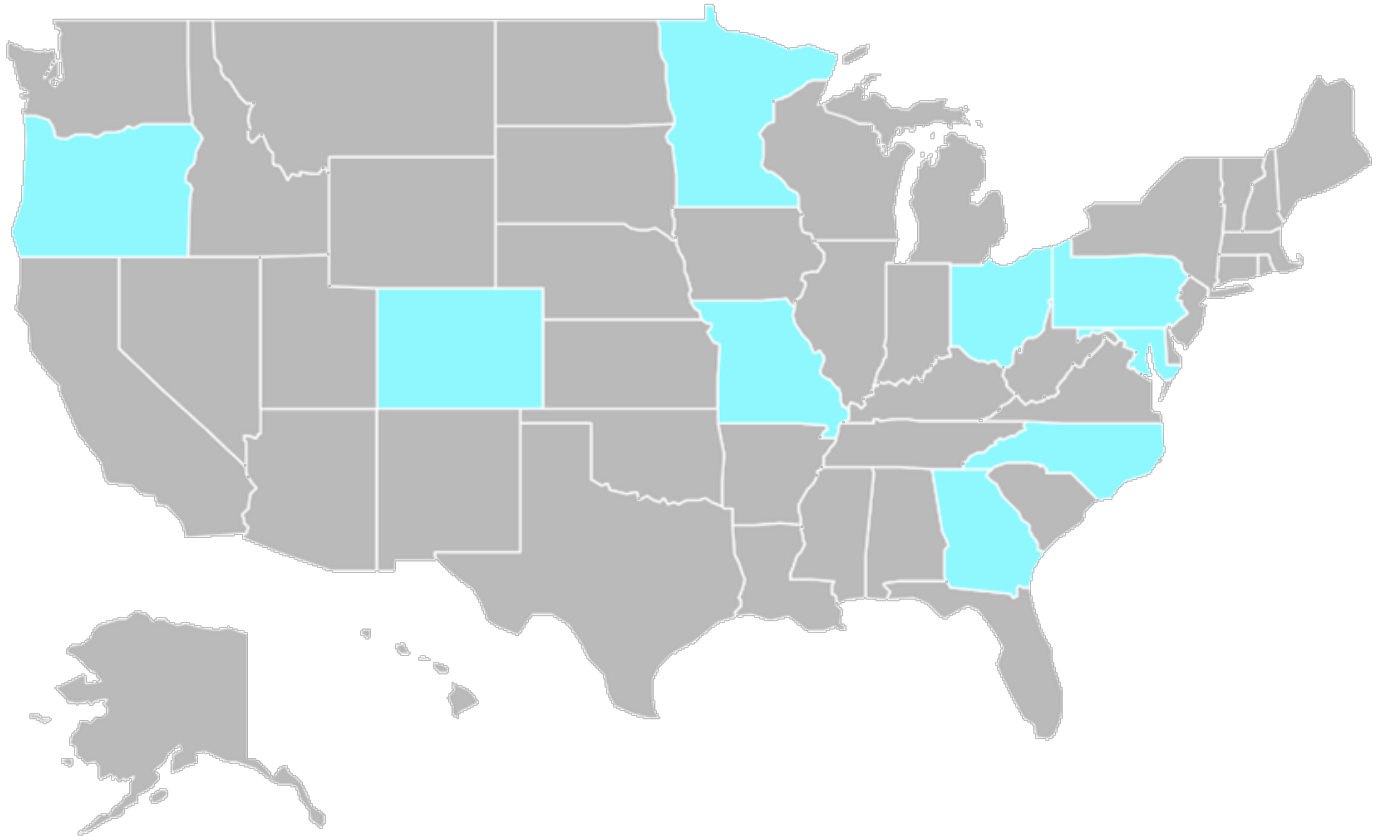
# TBED AROUND THE COUNTRY




*Compared to other states' TBED and economic development programs, USTAR is relatively small.*

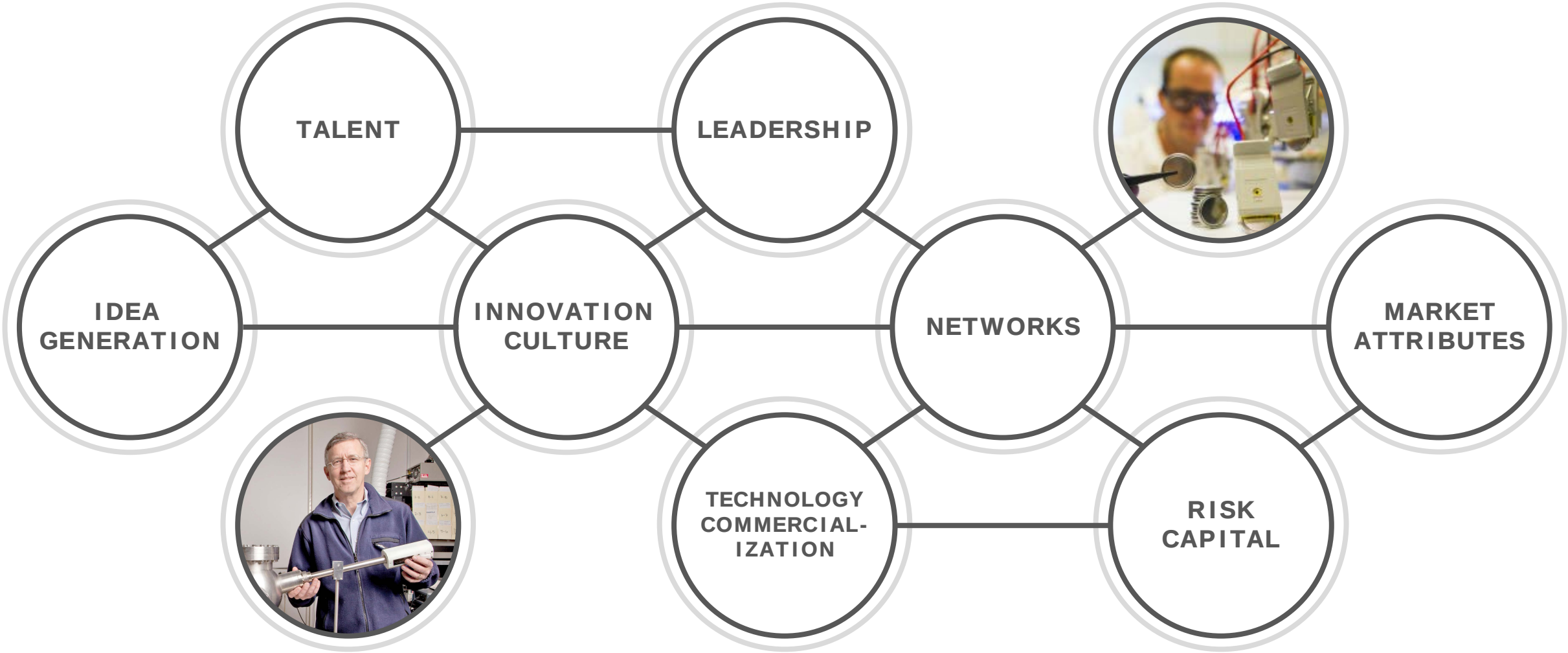
*Utah spends just $5 per capita on technology-based economic development.*

# TBED AROUND THE COUNTRY

# Innovation Infrastructure

# INNOVATION INFRASTRUCTURE

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# COMPETITIVE GRANTS

## Technology Acceleration Program

Accelerates the development of commercially viable technology in emerging companies that is aligned to USTAR target technology areas

## University Technology Acceleration Grant

Accelerates the development of commercially viable technology aligned to USTAR target technology areas in the university setting

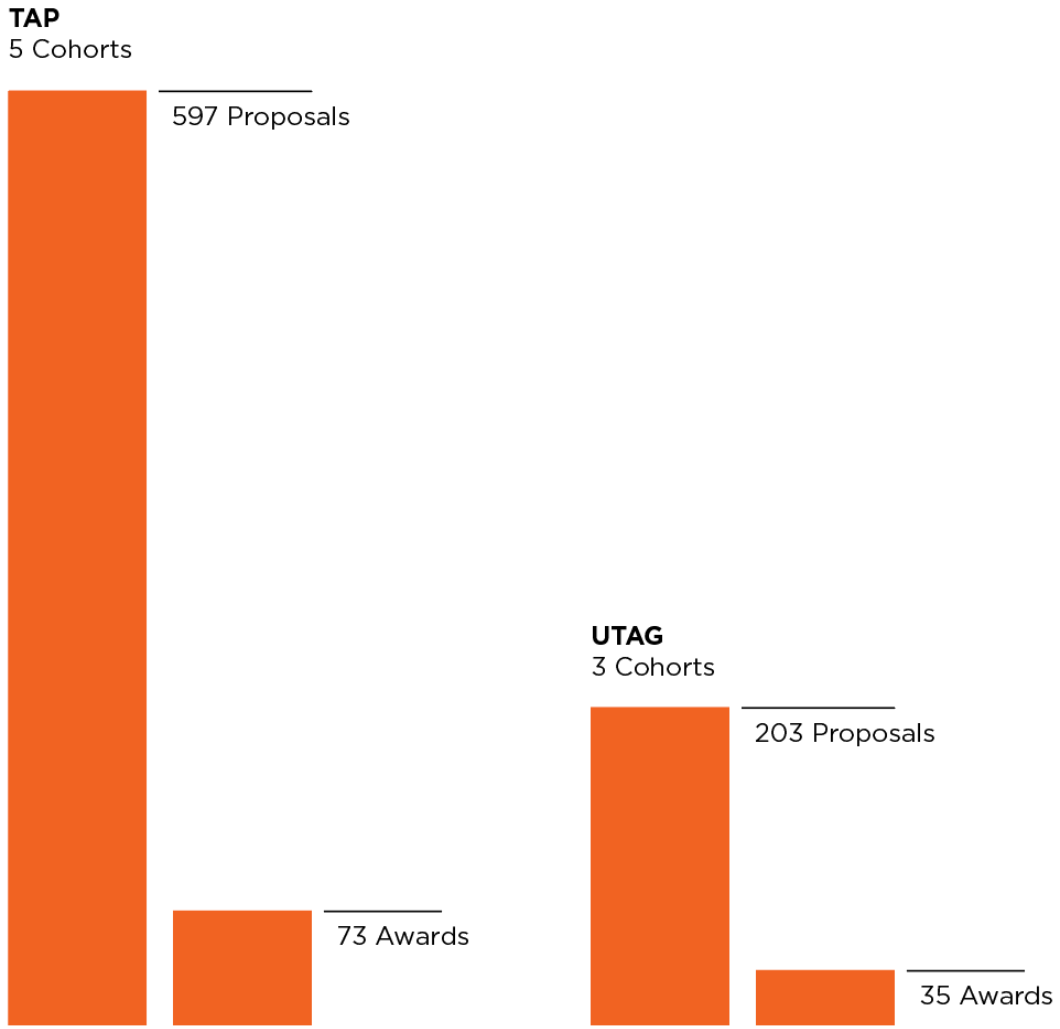
## Industry Partnership Program

Supports partnerships between private industry and university researchers to address technology problems or gaps identified by the company

# COMPETITIVE GRANTS: PROCESS

1. Targeted Technology Sectors, Admin Rules & Budgets Set by Governing Authority
2. Open Competitive Grant Solicitations
3. Letter of Intent & Application Submission
4. Administrative Review for Eligibility & Completeness
5. Peer Review by 1 Business & 2 Technical Experts*
6. Governing Authority Subcommittee Reviews Top Proposals & Makes Recommendations
7. Full Governing Authority Votes & Approves Winning Proposals
8. Contracts Negotiated & Milestones Finalized
9. USTAR Technical Staff Consults with Grantees
10. Milestone Completion Assessed by USTAR Technical Staff
11. Grant Funds Dispersed Upon Milestone Completion
12. Impact Data & Metrics Collected by Third Party Assessor**

# COMPETITIVE GRANTS: DEMAND

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# Success Metrics / Impact Data

# USTAR IMPACT


1. **Is USTAR beneficial to the state and should it continue?**
2. **What has been USTAR's performance since the 2016 reset?**
3. **Are there changes that should be made to USTAR's current structure of programs?**
4. **Are USTAR's programs being run effectively and efficiently?**
5. **Are there similar programs that could provide similar benefits at a lower cost?**
6. **Are the reporting requirements effective at measuring USTAR's performance?**

# USTAR IMPACT


"The data and analysis presented in this evaluation find that USTAR's current programs are strategic, aligned to the state's technology-based economic development goals, and focused on an important market gap that is constraining deep technology startup growth and economic diversification."

"USTAR is a lean, effective, and outcomes-driven organization."

"USTAR's effectiveness is due to both the caliber of its staff, as well as the deep level of engagement by its Governing Authority members."

# USTAR IMPACT


"Eliminating USTAR would send a strong message that the State of Utah is retreating from its long-term commitment and investment to the growth of its research- and technology-based sectors at a time when states like Wyoming, Virginia, and Massachusetts are increasing investments in theirs."

# USTAR ECONOMIC IMPACT


USTAR has met or exceeded its five-year performance metrics in just two years.

# USTAR ECONOMIC IMPACT

## USTAR has met or exceeded its five-year performance metrics in just two years.

USTAR companies have generated *$27M in sales* of commercialized products since 2016.

2016-2017 saw a *351% increase in sales* for USTAR companies.

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# USTAR ECONOMIC IMPACT

**USTAR has met or exceeded its five-year performance metrics in just two years.**

USTAR companies have created *258 FT and 166 PT jobs* since 2016.

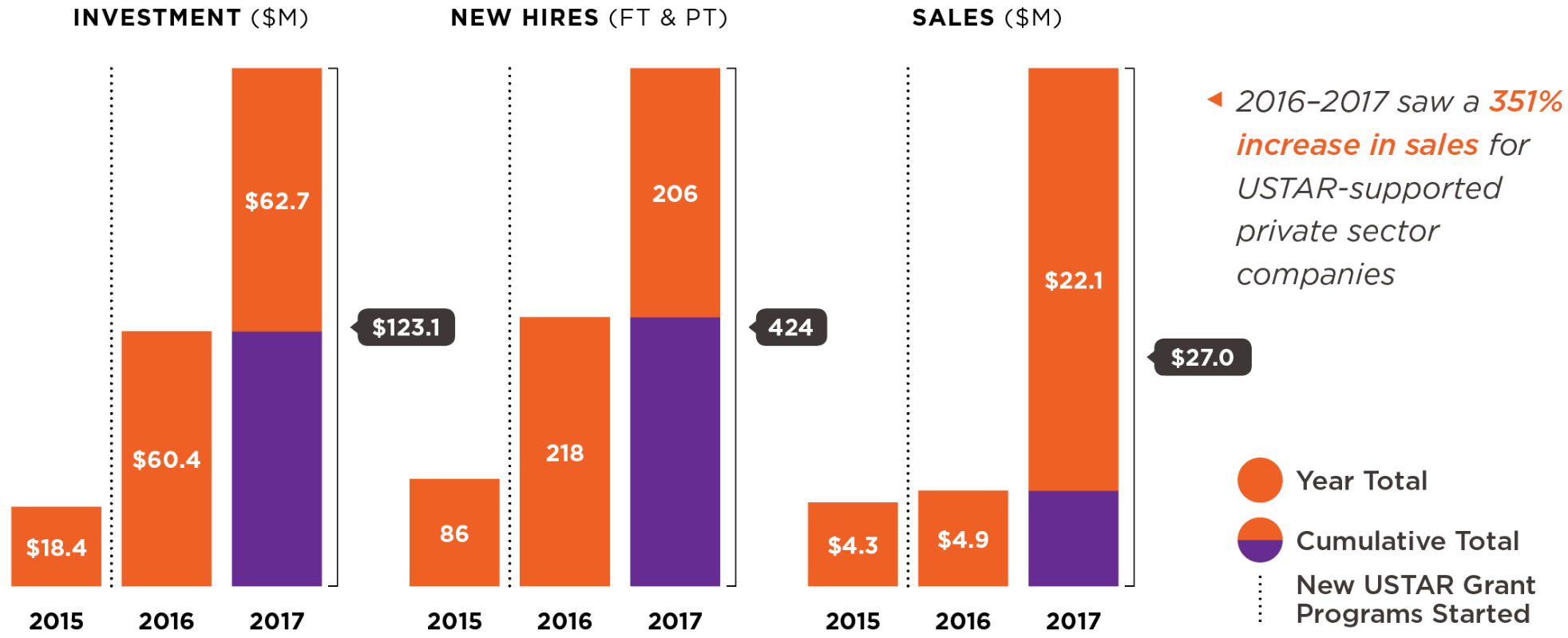
# USTAR ECONOMIC IMPACT

**USTAR has met or exceeded its five-year performance metrics in just two years.**

USTAR companies have raised ***$123.1M in follow-on funding*** since 2016.

# USTAR ECONOMIC IMPACT

## USTAR has met or exceeded its five-year performance metrics in just two years.

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# Thank You